

FEASIBILITY/DUE DILLIGENCE PHASE

I. Archaeological Study

Dewberry proposes to engage The College of William and Mary to perform a cultural resources survey. The full scope of work associated with this task is included herewith as Attachment A.

II. Geotechnical Study

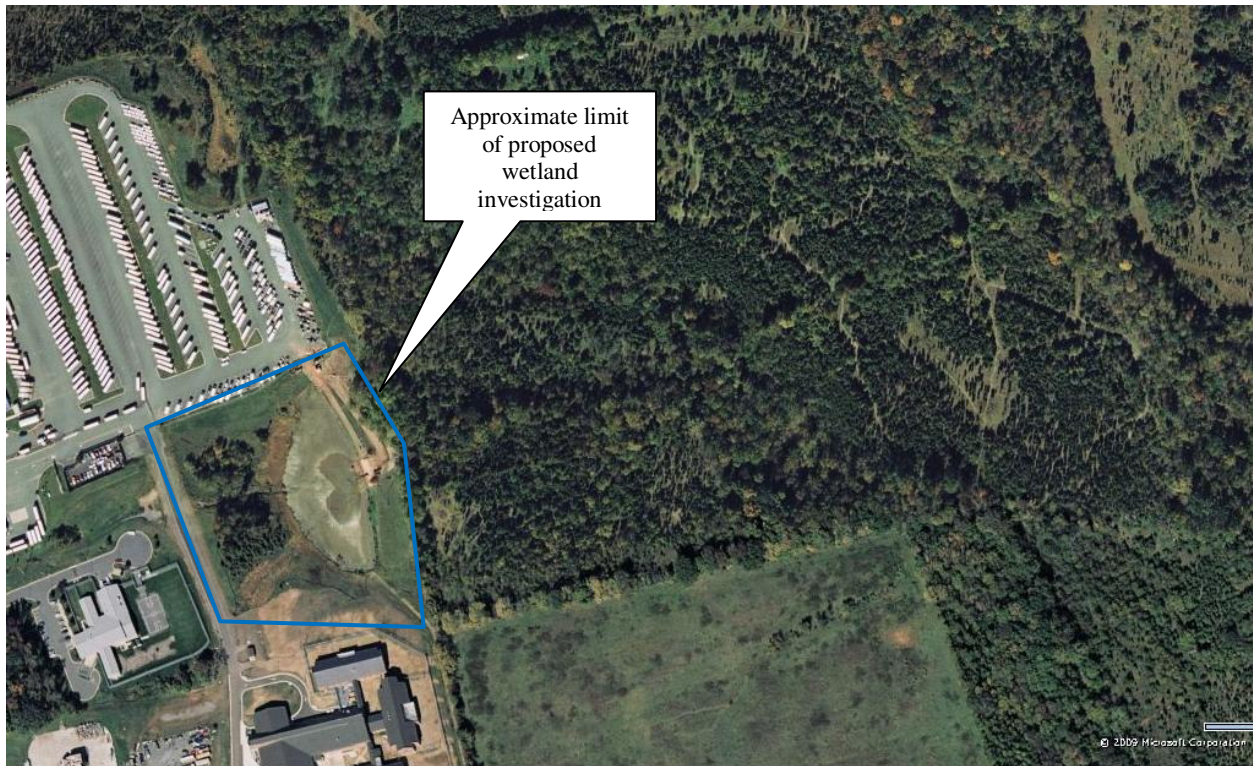
Dewberry proposes to engage ECS Mid-Atlantic, LLC to perform a preliminary subsurface investigation and subsequent preliminary geotechnical engineering report. The full scope of work associated with this task is included herewith as Attachment B.

III. Topographic Survey

Aerial topography for the site will result in drafted topography at a scale of 1" = 30' with 2 foot contour intervals and selected spot shots. It is our estimate that approximately 18 acres of topography will be required. Should any additional fill-in topography be required, we will provide you with a scope of work and fee prior to performing services. It should be noted that Aero-Metric has previously flown this area roughly 4 years ago, and will be using that photography to develop the topographic survey described herein. It is Dewberry's assumption that the age of the photography will be acceptable to the County, as the land disturbance in this area over that period of time appears to be minimal. Topography generated in this way should be sufficient to conduct the studies described herein, and represents a substantial cost savings versus having to re-fly the property. Aero-Metric's proposal is presented herewith as Attachment C.

IV. Wetland/Stream Delineation

In accordance with the methods listed in the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual et al., Dewberry will conduct a delineation of the waters of the U. S. including wetlands on the subject property noted on the following figure. Field indicators of hydrophytic vegetation, hydric soils, and wetland hydrology will be observed and recorded to generally determine the approximate wetland boundaries. Boundaries of jurisdictional wetlands and streams will be flagged with survey tape and pin flags. Data points will be taken at appropriate wetland areas using approved USACE data forms to characterize the type of wetland community found. Dewberry will also record the general composition of vegetation identified onsite. The data gathered during the wetland delineation will be used to prepare a Wetland Delineation Report. The Wetland Report will include information summarized from the wetland/stream investigation (including wetland data sheets, required JD forms, and site photographs). It will also include map exhibits displaying jurisdictional boundaries surveyed in Task V. Dewberry will also conduct stream assessments of the reaches that may be impacted utilizing the DEQ/USACE Unified Stream Methodology to assist in an impact analysis for use during a future Joint Permit Application Process.



V. Wetland/Stream Field Survey

To complete Tasks IV and VI, the wetland and waters of the United States (WOUS) delineation must be surveyed. The delineation and surveyed lines (hard copy and digital format) are required to develop map exhibits for Task IV and to complete Task VI. Wetlands flagging will be located with field surveying methods suitable to prepare a wetlands delineation map. The area that will be flagged is the land area between the bus parking and the existing adult detention center only.

VI. Obtain Jurisdictional Determination (JD)

This report will be forwarded to the U. S. Army Corps of Engineers (USACE) with a copy to the client. Dewberry will request a verification of the jurisdictional boundary locations from USACE. This scope of services assumes that one site visit will be conducted with the USACE to confirm jurisdictional boundaries of the on-site waters and wetlands. Once the USACE confirms the boundaries, Dewberry will request a letter of verification. This verification is valid for five years from the date of issuance. Dewberry will conduct an updated review of the WSSI delineation to confirm the mapped boundaries remain similar to those originally mapped and will request an extension for the previous JD acquired by WSSI from the Corps of Engineers. This JD is set to expire on June 3, 2009.

VII. Rare, Threatened & Endangered Species Search

Dewberry will complete and submit a Project Review request to the DCR Division of Natural Heritage to determine the potential or likely presence of rare, threatened or endangered species within the project area.

VIII. Preliminary Engineering Study

Dewberry will prepare a preliminary site layout for the proposed facility based on the sketched provided at our scoping meeting. This layout will be used to develop a plan indicating major constraints that are identified as a result of the studies outlined in sections I through VII. A preliminary grading study will also be prepared to determine possible limits of construction, approximate cut and fill locations and

potential wetland impacts. It is our understanding that the existing pond will be relocated. Under this task, a preliminary stormwater management/BMP facility will be designed to accommodate this relocation, and the anticipated increases in impervious area that this site will generate. All stormwater management and BMP designs will be based on current county and regulations.

IX. Natural Resources Inventory and Miscellaneous Engineering Services

Task IX defines the scope of work associated with the development of documents intended to satisfy requirements of the Environmental Design Standards of the Loudoun County Zoning Ordinance specific to Natural Resources Inventory and Tree Preservation. Dewberry's efforts associated with the preparation of a Natural Resources Inventory and Plan are comprised of the following:

- A. **Tree Survey.** We will provide a comprehensive Field Survey performed by an ISA-registered Arborist with a focus on designated developable areas on the subject property; and in accordance with the requirements of Chapter 7 of the Loudoun County Development Standards. This Tree Survey will include tenth-acre plot samples to establish forest type and condition, and photo-reconnaissance.
- B. **Specimen Tree Survey.** We will provide a complete list of all trees which could be considered of specimen quality, or which could be possible Commonwealth or National Champion quality trees within the subject property boundaries.
- C. **Natural Resources Inventory Plan Preparation.** We will prepare a Plan at approximately 1" = 60' scale, indicating all pertinent field findings, including showing the location of sample plots, associated tree stand characteristics, preliminary limits of disturbance, and preliminary proposed tree conservation areas. This plan will also indicate the locations of Specimen Trees, and other unique development site features relative to tree stand evaluation.

X. Environmental Impact Report (EIR) – NOT NEEDED AT THIS TIME

Task X defines the scope of work associated with the coordination and documentation of the Environmental Impact Review process in compliance with Code of Virginia §10.1-1188 and Executive Order 88(01). Dewberry proposes to prepare the Notice of Intent to Submit an EIR for Review, and submit it to the DRPT for signature and DEQ submittal. Dewberry will then conduct data reviews, agency coordination, and will facilitate County coordination, and compile the Environmental Impact Report.

Completion of an Environmental Impact Report

Detailed data will be collected and utilized to create an Environmental Impact Report in compliance with Virginia State Law detailed in the Code of Virginia §10.1-1188. The EIR will address potential environmental impacts including, cultural resource, agricultural and forestry resources, ecological, recreational, geological, air quality, wetlands and water quality impacts.

The initial phase of this process consists of scoping and coordination with the appropriate state, and local agencies to facilitate data collection. The EIR will include data collection and impact determinations for each alternative which includes the no build original alignment and at a minimum the preferred configuration. The following is an example of the resource discussions analyzed:

- identification of known populations of Federal and State Threatened and Endangered Species by means of scoping letters to the US Fish & Wildlife Service (USFWS), the Virginia Department of Game and Inland Fisheries (VDGIF), and the Department of Conservation and Recreation (DCR);

- identification of types and acreage of wildlife habitats;
- wetland and waters per the Corps of Engineers JD
- review of existing water quality data of waters and watersheds in the project area;
- determination of impacts to existing floodplain, stream buffer or resource protection area, and resource management area limits;
- determination of the acreage of Prime Farmlands, Agricultural and Forestal Districts, and public recreation areas located within the project area;
- unique terrestrial vegetation and impacts to aquatic life
- qualitative evaluation of air quality for each alternative and determination of potential impacts on the region.
- review of the geology and groundwater resources in the project area; and
- discussion of the Phase I cultural resources survey previously conducted.

The EIR will also include a discussion of the energy and water conservation methods, and stormwater management and other pollution prevention techniques proposed.

The project's potential impacts to each resource will be assessed and reported in the document, which will be forwarded to DPRT review and submittal to DEQ with approximately 25 copies. Any requested changes to the document will be completed under Task XI. For the purposes of defining a scope for this task, it is assumed that a maximum of two development alternatives, plus a no-build alternative will be evaluated. It is further assumed that a traffic count study will not be required and that no quantitative air quality study will be necessary.

XI. EIR Agency Coordination – NOT NEEDED AT THIS TIME

During the EIR review process, the regulatory agencies often request additional clarification, information or additional copies of reports, etc. This task covers the time and materials spent on finalizing the document and responding to agency comments. Due to the unpredictable nature of the effort associated with the agency review process, this task is proposed as an hourly not to exceed task with an upset limit indicated under the Compensation section of this proposal. Should satisfying the agencies require more effort than what is presented herein, it is proposed that this upset limit would be renegotiated to a mutually acceptable amount.

XII. Storm Water Management Study

Under this task, Dewberry will make a preliminary determination of potential sizing, location and grading options of the storm water management (SWM) facility that will ultimately serve this site. In close coordination with the County, Dewberry will seek to find a permissible configuration of the facility that maximizes the County's ability to utilize the land area associated with the project, while meeting the requirements of the regulatory agencies having jurisdiction over the SWM facility. Both storm water management (SWM) and water quality Best Management Practices (BMP) will be evaluated. This task is broken into the following subtasks:

1. **Master Plan Determination:** Dewberry will compile and assemble the necessary data to evaluate the entire contributing watershed to this facility, based on projected maximum land use build out. Hydrologic models will be developed to simulate runoff conditions for the site in its ultimate built-out state.
2. **Preliminary Pond Sizing/location:** Once the hydrologic model for the overall watershed is developed, the pond will be sized to meet the current requirements of Loudoun County and the Virginia Storm Water Management Handbook, based on both the proposed build-out of the transit facility and the future development of the adjacent upstream areas. In this subtask, the pond will be evaluated both as a modification to its existing location and as a relocated facility further downstream. A preliminary grading study will be performed for both alternatives, in addition to a

review of how the facility will function with each of the two current site layouts being evaluated by the County. The grading study will determine possible limits of construction, approximate cut and fill locations and potential wetland impacts.

3. **Preliminary Determination of Potential Impacts from 2010 State Storm Water Regulation updates:** Dewberry will determine the approximate configuration and increased sizing for the SWM facility based on forthcoming changes to Virginia's Storm Water Management Handbook, in an effort to understand how large the facility may ultimately be required to be if permitted after the implementation of the new regulations on July 1, 2010.
4. **Facility Permitability:** Each alternative will be reviewed with our Wetlands permitting staff to determine how significant the wetland impacts will be, what mitigation items may ultimately factor in to the total cost of the facility, and whether or not the impacts for each alternative have been minimized as much as possible. During this task, all findings will be presented to the County on a real time basis to ensure that all parties are kept up to date on the potential obstacles that may be encountered during permitting.

Task XIII. SWM Coordination and Meetings

Coordination with the County and its consultants, including meetings, will be covered under this task. This task is proposed as an hourly not to exceed item with an upset limit as indicated in the Compensation section of this proposal. Should additional time be required for meetings or coordination, it is proposed that the upset limit would be adjusted to a mutually agreeable amount.

FINAL ENGINEERING/SPECIAL EXCEPTION PHASE

XIV. Existing Conditions Plan

Dewberry will prepare an existing conditions plan to identify the development constraints of this property. The plan will be based on mapping prepared during the earlier phases of this project, as well as available county information. The plan will incorporate the following features:

- Topographical survey data, property boundary and easements
- Delineated wetlands
- Steep slopes as determined by Loudoun County regulations
- Setbacks and required landscape buffers in accordance with LCZO and Facilities Standards Manual
- Floodplains and water bodies
- Soils
- Resource Protection Areas (RPAs) as currently proposed in the Draft Chesapeake Bay regulations
- A preliminary engineering review of the above items in conjunction with these proposed facilities

This existing conditions plan will be used for preparing the pre-application meeting package, the Special Exception Plat, Commission Permit application and final site and grading plans.

XV. Preapplication Conference Package

Prior to preparing a Special Exception Application, the applicant must first meet with the Loudoun County Planning staff to introduce the project to Loudoun County Staff and to discuss any land use issues. In preparation for this meeting, a package will be prepared which will include the following items:

- A transit operations and maintenance facility plan overlay of the Existing Conditions Plan

- A written description of known existing environmental, topographical and structural features on the site and a description of the proposed project.

XVI. Preliminary Layout and Grading Plan

Once the preapplication meeting has occurred, Dewberry will develop the preliminary layout of the Transit Operations and Maintenance Facility. Dewberry will review the LCZO and the Loudoun County Facilities Standards Manual and incorporate known requirements into the layout of this project and provide a preliminary grading plan of the project based on County program criteria. A preliminary layout of watermain and sanitary sewer required to serve this project will be prepared as well. The project is located within the Town of Leesburg Water and Sanitary Sewer service area.

The existing stormwater management facility on this property provides stormwater management for a large upstream partially developed watershed. This existing facility also includes existing wetlands and wetlands downstream of this facility to Lower Sycolin Creek.

In addition, it is anticipated that this project will need to meet the criteria of the current Virginia Stormwater Management Handbook for stormwater management and Best Management Practices. Pending adoption of future regulations will be considered and may need to be incorporated into the final site plan, depending on the timing of the legislation and your schedule for site development.

Based on this preliminary grading plan, site programming issues will be considered in coordination with Loudoun County Office of Construction & Waste Management staff, CH2MHILL and Veolia Transportation staff. Feasibility and cost considerations will be considered in concert with this preliminary grading plan to incorporate any layout changes into the site plan prior to submission of the Special Exception/Commission Permit Plat.

XVII. Joint Permit Application and Submission

Dewberry proposes to provide water quality permitting services to Loudoun County for the Transit Operations and Maintenance facility project. This project will require Clean Water Act Section 404/401 permits from the Virginia Department of Environmental Quality (DEQ), and the U.S. Army Corps of Engineers (USACE). As the drainage area to any of the jurisdictional streams to be impacted by the project is less than 5 square miles, it is expected to be exempt from Virginia Marine Resources Commission permits. Based upon our preliminary analysis, it appears that the project qualifies for a general permit from DEQ and an individual permit from USACE.

Dewberry will prepare a joint permit application for the proposed project. Applications include general information about the applicant, the amounts and types of waters and wetlands proposed to be impacted, and an alternatives analysis detailing the avoidance and minimization efforts made. The application will include graphics detailing the proposed project and unavoidable impacts. Dewberry will analyze the wetland areas to be affected by the proposed plan, summarize the results in both narrative and tabular formats, and submit the application package to the appropriate regulatory agencies. Due to site constraints, any mitigation proposed is expected to be in the form of wetland and waters mitigation bank credits or the in-lieu fee. Dewberry will provide the County with a list of at least three mitigation bank providers to obtain mitigation costs. The costs for mitigation and permit processing fees are not included in this task.

XVIII. Environmental Regulatory Agency Coordination

During the application review, mitigation review, or the draft permit process, the environmental regulatory agencies often request additional clarification or additional copies of reports, etc. This task covers the time and materials spent on the permit application follow-up or for an on-site visit.

XIX. VSMP Permit Application and Storm Water Pollution Prevention Plan

Since the project will disturb over 1 acre of land it will require coverage under the Virginia Stormwater Management Permit (VSMP) general permit for construction sites. This requires the filing of a VSMP registration statement, developing a stormwater pollution prevention plan (SWPPP), and submission of a permit application fee. Dewberry proposes to complete and file the registration statement and develop a project-specific SWPPP. The Registration Statement is required to contain information about the applicant, the name of the receiving water body, a topographic map of the site, estimated disturbed area, and the name of the erosion and sediment (E&S) approval authority. The SWPPP is required to address E&S control measures, inspection schedules, inspection forms, a spill prevention plan, a sequencing of construction, site acreages (including any offsite borrow or fill material not already operating under an existing VSMP permit), drainage maps, and a description of fueling, chemical, sanitary, and fertilizer storage areas.

XX. Permit Construction Monitoring

Once the permits have been issued, Dewberry proposes to conduct Regulatory Construction Monitoring of wetland impact areas during the construction of this facility. Completion of this work includes written reports and site photographs that are submitted to DEQ at intervals specified in the DEQ Permit. Dewberry will perform the required on-site monitoring at proposed wetland/stream impact areas as specified in regulatory permits. This task includes site monitoring at specified intervals, photographic documentation, and report generation, and contractor follow-up as necessary. The reports require photographs from set photo stations documenting the work performed in impact areas, summary of work completed during the monitoring period, and expected date of completion. For most DEQ general permits, monitoring is to occur on months 1, 2, 3, 6, 12, plus a pre-construction event. This will cover a total of six monitoring events over a one year construction period, and the associated office time to prepare the requisite reports. Any construction monitoring required as part of the VSMP permit is assumed to be conducted by the contractor and is not included in this task.

XXI. Special Exception/Commission Permit Package

Dewberry will assist Loudoun County in preparing the Special Exception/Commission Permit Application (SE/CP). Dewberry will prepare the following documents:

- Land Development Application
- Vicinity Map
- Special Exception/Commission Permit Plat

Dewberry will assist with the preparation of the Statement of Justification and disclosure of real parties in interest. Additionally, previously completed due diligence studies will be utilized in the preparation of the application. Should the need for traffic engineering services become necessary during the SE/CP process, Dewberry will engage a qualified traffic engineering firm in accordance with section XXIX "Traffic Engineering".

Comments received on this package will be coordinated with the client. Responses to these comments will be prepared and the package will be resubmitted.

XXII. Preparation of Final Site Plan

Dewberry will prepare a site plan package for submission to Loudoun County which will include, at a minimum, the following sheets:

- Cover sheet with zoning information
- Site layout plan
- Site grading plan
- Erosion control plan, narrative and details
- Site distance plan
- Construction details
- Landscape plan and details required by FSM and Zoning Ordinance
- Utility profiles and computations
- Stormwater management/BMP computations and details
- Storm drainage and outfall computations

The package will include a land development application and various other forms and documents as required by Loudoun County. The project will be required to be submitted to Loudoun County ESI (Engineer's and Surveyor's Institute) review. The concerns of this agency will have to be incorporated prior to any submission to Loudoun County. After ESI indicates that this application is acceptable, the site plan package will be submitted for review to Loudoun County Building and Development which will be distributed to various agencies including the Virginia Department of Transportation for review. Our understanding is that Loudoun County will distribute this plan to the Town of Leesburg for their review of the sanitary sewer and watermain facilities as well. Comments will be coordinated with the client upon receipt and responses to these comments will be prepared with the resubmission of this site plan. We have assumed that the improvements related to this facility and associated site plan will not be bonded.

XXIII. Final SWM/BMP Design

This project will require stormwater management and Best Management Practices in accordance with the Loudoun County and Virginia State stormwater management criteria. The existing stormwater management facility is planned to be relocated and updated to current criteria. The following tasks will need to be designed and completed for the design of this facility.

- Pre and post developed hydrologic analysis
- Hydraulic design and analysis of outfall structure to optimize volume and pond configuration including stage discharge analysis and routing of design storms with tailwater calculations
- BMP analysis including pollutant removal efficiency calculations and narrative
- SWM narrative
- Details and profiles of outfall structure and emergency spillway
- Storage and volume calculations
- Buoyancy calculations for outfall structure
- Incorporation of embankment design and other geotechnical concerns into plan set
- Address hot spot concerns related to the generation of pollutants from the transit maintenance facility

XXIV. Preparation of easement plats (if required)

Based on the requirements of Loudoun County, various easements will be required prior to approval of the site plan. An easement plat showing easements on this property will be prepared with this task and a deed of easement will need to be prepared by a land use attorney. Dewberry will submit this plat and deed to Loudoun County for review and will coordinate submissions and resubmissions of this package with Loudoun County.

XXV. Grading Permit

Dewberry will prepare the grading permit package for submission to Loudoun County including the grading permit application, wetland delineations, VSMP/SWPPP packages and permit plan sets. This package will be submitted to the erosion control inspector and we will coordinate any comments on this package with the inspector. It is assumed that bonding will not be required for this permit.

XXVI. Coordination

Under this task, Dewberry will coordinate with the Client, his consultants, utility providers and other jurisdictional agencies (when not specified elsewhere in this proposal) as may become necessary throughout the course of the project. This task covers necessary communication and effort related to identifying and accommodating the needs of the Client, the end-user, his consultants, his construction manager, architect and any other entities whose efforts or interests relate to the preparation of the site plan.

XXVII. Meetings

Meetings, coordination and conference calls will be provided as requested in preparation of the above referenced tasks.

XXVIII. Geotechnical Engineering

Dewberry will engage a geotechnical engineer upon approval of the preliminary site layout and associated grading plan. Their final scope and fee will not be determined until that time, and as such has not been included in this proposal.

XXIX. Traffic Engineering

If needed during the Special Exception process, Dewberry will engage a qualified traffic engineering consultant to prepare traffic studies and recommendations as may be needed in connection with the submission of the SE application. We are noting their scope and fee as TBD, pending the preapplication meeting.

SPECIFIC EXCLUSIONS

- NEPA documentation
- Preparation of a Boundary Survey
- Preparation of flood plain studies.
- Design of outfall improvements to address outfall adequacy.
- Materials testing.
- All underground utility location services.
- Architectural services.

- Structural engineering services.
- Mechanical/Electrical/Plumbing services.
- Landscape architecture/irrigation design
- Noise analysis and mitigation design
- Landscape Architecture
- Endangered species surveys, including mussel and turtle surveys.
- Phase II/III archaeological surveys and/or other cultural resource surveys.
- Permit application fees (including JPA and VSMP) or public notice fees.
- Wetland functional analysis
- Water quality chemical testing
- Sediment baseline and monitoring survey, testing and sampling.
- Stream restoration design
- Natural stream channel design
- Conceptual or final mitigation plans, other than mitigation banking
- Mitigation banking fees
- Phase I, II or III environmental site assessments
- Well or septic permits
- Lead and/or asbestos surveys, or other hazardous material surveys
- Erosion and sediment control installation and/or inspection
- Preparation of a boundary survey
- Geotechnical engineering (Scope and Fee TBD)
- Traffic studies (Scope and Fee TBD)
- Additional field surveying
- Additional exhibits required for preparation of Special Exception/Commission Permit, beyond those minimally required for processing a standard application in accordance with the County's SE/CP process
- Submission and review fees
- Offsite easement plats (beyond county property)
- Watermain study, sanitary sewer capacity analysis or water meter and serviceline computations
- Roadway improvements for turn lanes
- Design of offsite utilities (beyond county property)
- Relocation and design of private utilities
- Site lighting design – This can be provided if required. For purposes of this proposal, it is assumed that this will be provided as a part of the architectural contract.